

Oct 52

INSTRUMENT
SOCIETY of
AMERICA



SARNIA SECTION



Monthly Bulletin



AUTOMATIC CONTROL EQUIPMENT

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Flow

Pressure

Temperature

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The Instrument Society of America

SARNIA SECTION

has as its objectives the advancement of the arts and sciences associated with the theory, design, and use of instruments in the various industries and technologies in the sarnia area.

The immediate benefits derived by the Sarnia members include the monthly publication *Instruments*, a monthly general meeting at which a qualified speaker discusses an instrumentation topic, and a winter school for instrument men who are interested in improving their knowledge of currently available instruments, as well as their servicing techniques.

Through the activities of its many committees, the main Society is striving constantly for the improvement and standardization of instruments and instrumentation techniques in the process industries. It is therefore worthy of the support of everyone to whom instruments are a livelihood.

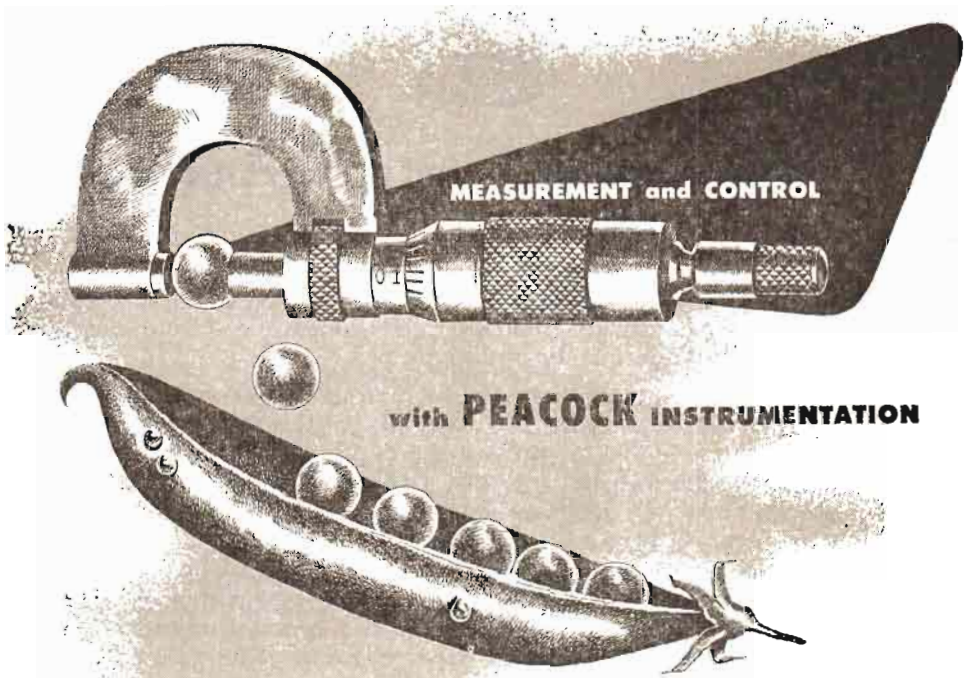
Executive Officers for the 1952-53 season are:

Honorary Chairman	MR. J. M. HACKING Plant Superintendent Dow Chemical Company
President	AMBY UPFOLD Polymer Corporation
Vice President	WARREN McKAY Polymer Corporation
Secretary	LARRY HALL Austin Construction Co.
Treasurer	LAURIE PARKER Dow Chemical Company

Meetings are held each month on the third Monday at 8.00 P.M. The meeting place will be Club Rooms B and C of the Sarnia YM-YWCA unless otherwise announced.

Membership dues are \$12.00 per annum for Senior Members and \$7.50 for Associate Members, and are payable to the Treasurer of the Sarnia Section.

Correspondence relating to the general activities of the Sarnia Section should be addressed to L. J. Hall, Secretary, 730 Talfourd St., Sarnia. Correspondence concerning programs should be sent to J. R. Connell, Program Chairman, P. O. Box 233, Sarnia.

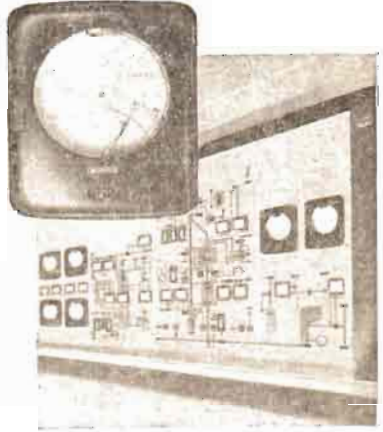


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SECTION NEWS

Vol. 2, No. 2.

October 1952.

Apology

The editor of the bulletin wishes to call your attention to an unfortunate error which appears on the advertisement of Peacock Brothers Limited on the page opposite. You will notice that the cut of the Graphic Panel is upside down. We regret this error very much and wish to apologize to the Peacock people through the medium of this paper.

Annual School

Everyone will be pleased to hear that there will be another course, or rather, two courses in instrumentation this year and from what K. Goldring, our educational chairman, tells us about them, we are sure that they will prove both interesting and informative.

The first course will be on Tuesday evening, October 21, at the High School, and will include a talk by G. Catchpole on instrumentation in general and its future trends. Further sessions will be held each week on Tuesday and Thursday at 8 o'clock.

The first course will be devoted to "Primary Elements" and, due to the vast amount of subject matter to be covered, will be largely theoretical. This course is something which none of us can afford to miss, for even though much of our time concerns control systems, the whole she bang is useless without accurate measurement.

This course will come to an end, probably, some time in January next. The exact date depends on how long the Board of Education keeps the school closed during the Christmas season.

The second half of the course is itself divided into two parts:

A. A review of the electrical lectures of last year, plus an excursion into the treacherous world of μ .

B. An advanced course on control theory. This, to my way of thinking, is a very valuable section, for even though we know that theory and practice are often not in agreement where control systems are concerned, the course will give us a whole bunch of new reasons why the stuff doesn't work.

It is thought that the final lecture will come about March 15, though how Ken proposes to cover all this by then is beyond me. I can only suggest that all students come prepared to catch it the first time over because there will be little time to retrace our steps.

Don't, however, be faint-hearted. Fill out the form, which for your convenience is included in this issue on page and join the rest of us in the pursuit of knowledge.

P.S. It let's you out for the evening, too!

H. Hobbs,
Editor.

WRITTEN ON A ROLL CHART

I know that our readers will all agree that we find instrument work very interesting, and that every good instrument man takes pride in solving each problem as it arises, and in compelling the reluctant instrument to do its duty.

A little reluctance is all right, whether it be in instruments or women; and tends to add pleasure to the ultimate conquest. Once in a while, however, we may come across a control system so ill-conceived or an instrument so inadequate that success is always beyond the horizon, and repeated failure only frustrates us, and we lose what shreds of reputation we may have with the uninformed, but, (alas) powerful process men.

A case of this kind came to my notice last week when I saw in our shop a small control valve which had all the marks of long service and hard useage. One of our mechanics, who, I fear, does not possess the self-control so desirable in our work, stood near it muttering obscenities.

ME: Just a moment here, why are you in such a bad humour?

HE: Why?! We have had this valve in here for repair nine times in the last seven months and I am growing sick at the sight of it.

ME: I am amazed! It is only a one inch pilot operated steam reducing valve . It was bought to work and it should work. You must be doing something wrong.

HE: (Through clenched teeth) Each time, I have examined the springs and sealing diaphragms and found them faultless; I have cleaned and polished the pilot piston to a mirror like finish; I have restored both plug and seat to good condition; I have cleaned all drilled passages and renewed any doubtful gaskets. I have, furthermore, tested it on the bench as an air reducing valve and it works fine. Any suggestions?

ME: You do seem to have covered evrything. Why do you think it doesn't work?

HE: I've got lots of theories, such as too much superheat in the steam, too much condensate or too great a pressure drop, but nothing that helps to make it work as we want it to. It is supposed to control steam to a building heating system and the way it works, the tenants either freeze to death or the relief valve blows constantly. No happy medium.

ME: Could not this be controlled by an ordinary diaphragm valve, properly sized and with a suitable return spring to balance the downstream pressure if it were piped back to the diaphragm?

HE: Certainly, but such a valve costs a little more, and so we will spend more for maintenance than a good valve is worth in an effort to make this mechanical miscarriage work. Whoever bought this must be a low-grade idiot, or a relative by marriage, of an instrument salesman.

ME: You are getting too bitter, now. Did you put all those marks on the victim?

HE: No. In the early days, a hammer blow would make it throttle for a while, so these scars were caused by maddened process men. Enough of this, however. I must get it overhauled and out again for we have another one to work on this afternoon.

Well, I don't see much future for an instrument man who takes such a defeatist attitude. If it was bought to work, it should work, even if the Purchasing Department does their shopping in Kresge's.

H. Hobbs, Editor.

FINANCIAL REPORT

Monies collected this term	\$149.00
Expenses this term	\$145.34
Balance	\$ 3.66
Bank Balance from 1951-52 (Fwd)	\$231.55
Total Bank Balance	\$235.21

(Signed) L.F. Parker, Treasurer.

THE SECRETARY'S PAGE

Members are reminded that, for our meetings in the "Y", we will be using the basement room in future instead of club rooms "A" and "B" as formerly. This will give us more room for our expanding membership.

NEW MEMBERS

We welcome the following new members to the Sarnia Section of the I.S.A.:

Mr. H. Kohlmeier, Assistant Instrument Engineer, Polymer Corporation, Sarnia.

Mr. R.F. Killey, Technical Control Engineer, Polymer Corporation, Sarnia.

Mr. F. Maggs, Instrument Mechanic, Polymer Corporation, Sarnia.

This brings our total membership to 128.

NOVEMBER MEETING

The speaker for the November meeting will be Dr. Donal P. Eckman of the Conoflow Corporation, Philadelphia. Most members will remember Dr. Eckman particularly for his books, "Principles of Industrial Process Control" and "Industrial Instrumentation". He will speak on the "Problems of controlling Flow Rate".

Larry Hall.

APPLICATION FORM FOR I.S.A. SCHOOL

NAME

ADDRESS

COMPANY AFFILIATION

POSITION

In which of these subjects are you more interested?

Elementary Course in	Electrical Instruments &
Primary Elements.....	Automatic Control.....

About 25 applications can be accepted based on a percentage of I.S.A. members from each company. Get your application in early. You will be notified if your application is accepted. Mail completed form to the Secretary, L.J. Hall, 730 Talford St., Sarnia, Ontario. Course is free to I.S.A. Members. It will be financed by the Sarnia Section, I.S.A. and is made possible through the courtesy of the Sarnia Board of Education.

PROGRAM NOTICE

Date: October 20, 1952.

Place: Canadian Oil Company Plant
Corunna.

Time: 8 o'clock P.M.

Speaker: Mr. Rudy P. Lowe,
President, Percent Proportioners Inc.

Topic: "Continuous Automatic Proportioning and Blending Systems"

After the talk Mr. Ben Burn will conduct any interested members through the Canadian Oil Company central control room.

Meet at the main gate of the refinery and arrangements have been made to enter the plant for the meeting.



THE Honeywell symbol stands for the world's most complete line of instruments and controls . . . over 8,000 different types for control functions covering the residential, industrial and transportation fields.

Since 1932, when Honeywell first began manufacturing controls in Canada, the story has been one of continuous development and expansion. Unit production has increased 1200% in the last ten years; while at the same time diversity of types manufactured has grown steadily. Today over 70 different Honeywell controls are made in Canada, as well as the manufacturing and assembly of a constantly growing list of the company's line of Brown industrial instruments.

Industrial controllers represent the principal line of Honeywell's Brown Instruments Division . . . instruments that record, indicate, and/or control temperatures, pressures, humidity, fluid flow, liquid level, moisture content, acidity—practically any variable element of production, research, design, testing and accounting functions.

Honeywell Industrial Valves and a long list of other primary control elements form an important part of the Honeywell family. To serve industrial users, a large variety of instrument literature on products and applications is available on request. Of specific note is a list of several hundred Instrumentation Data Sheets covering particular applications of instruments. In addition a quarterly instrument magazine is published for interested engineers to keep them abreast of new instrument developments and the latest applications; and also a tabloid type bi-monthly paper called *Industrial Control News*, covering smaller control devices and their application.

Write today for a current list of IDS application sheets or to be put on the mailing list to receive *Instrumentation* or *Industrial Control News*. These service publications will be sent to you regularly without cost or obligation.

Minneapolis Honeywell Regulator Co., Ltd., Leaside, Toronto 17.

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Imperial Oil Limited
Polymer Corporation
Dow Chemical Company
Canadian Oil Company
Member at large

Russell Fulcher
Ross Lindsay
Len Carter
Ron Asselstine
Howard Robertson

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NATIONAL DIRECTOR

J. W. Graeb

MEMBERSHIP

Dick Langler

REFRESHMENTS

Ross Lindsay

SPECIAL EVENTS

Tom Needham

NEWSLETTER

Howard Robertson

EDUCATION

Ken Goldring

MAILING

Len Carter

HOUSE

Russ Fulcher

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Bob Connell

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Auto-Stop
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INDUSTROL CORPORATION

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—American Industrial Thermometers

—Consolidated Safety and Relief Valves

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Taylor TRI-ACT^{*} CONTROLLER

New Taylor Force-Balance Controller with new circuit is new concept in process control! Combines two proportional bands, one with rate action in closed loop ahead of automatic reset. Rate action shifts first band. Automatic reset shifts second band. You get:

1. Start-up with no overpeaking
2. Benefits of automatic reset without its evils.
3. Faster recovery on load changes.



Get complete details from Bulletin 98097. You'll see how the new TRI-ACT Controller creates new standards in pneumatic transmission systems for temperature, pressure, flow or liquid level control. Taylor Instrument Companies of Canada Limited, Toronto, Montreal, Winnipeg, Calgary, Vancouver. **Instruments for indicating, recording and controlling temperature, pressure, humidity, flow and liquid level.**

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