

IEEE Industry Applications Society and Smart Grid Applications on Industrial and Commercial Power Systems

David B. Durocher
President, IEEE IAS

Wei-Jen Lee, PhD, PE
Chair, IEEE IAS, I&CPS

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Industry Applications Society

- ▶ [IAS](#) was formed in 1965, two years after the creation of IEEE – it was our 50th birthday in 2015!



- ▶ Strategic plan – Globalization and Youth
- ▶ Current Members approximately 13,214
- ▶ 35% are less than 5 years members
- ▶ 50% membership outside of North America

IAS Mission

- **The advancement of the theory and practice** of electrical and electronic engineering in the development, design, manufacture and application of electrical systems, apparatus, devices and controls to the processes and equipment of industry and commerce;
- **the promotion** of safe, reliable and economical installations;
- **industry leadership** in energy conservation and environmental health and safety issues;
- **the creation** of voluntary engineering standards and recommended practices;
- **and the professional development** of its membership.

What makes IAS a unique Society

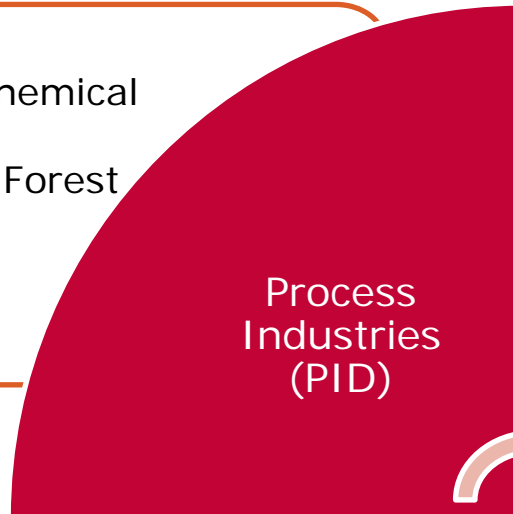
- Unique mix practicing engineers and researchers rubbing shoulders and collaborating
- 20 technical committees, broad technology range
- Emphasis on local contact – Chapters and SB Chapters development and support
- Sister societies – share conferences (30 conferences) and publications (7)
- Support 50 of the 900 IEEE Standards



Broad Range of Technical Interest

4 Departments, 20 Technical Committees

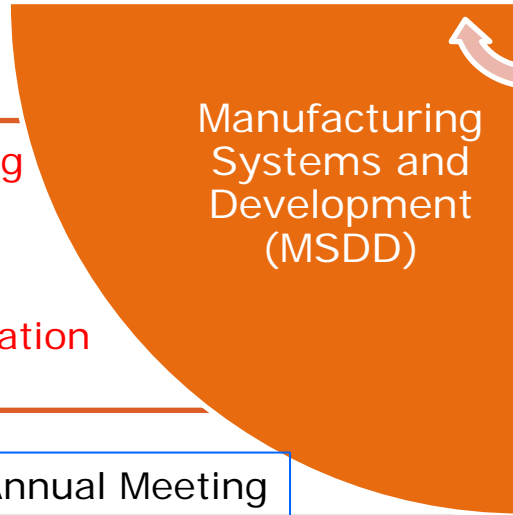
- Cement Industry
- Petroleum and Chemical Industry
- Pulp, Paper, and Forest Industry
- **Metal Industry**
- **Mining Industry**
- Electrical Safety



Industrial Power Conversion Systems (IPCSD)

- Electric Machines
- Industrial Drives
- Industrial Power Converter
- Power Electronic Devices/Components
- Renewable and Sustainable Energy Conversion Systems
- Transportation Systems

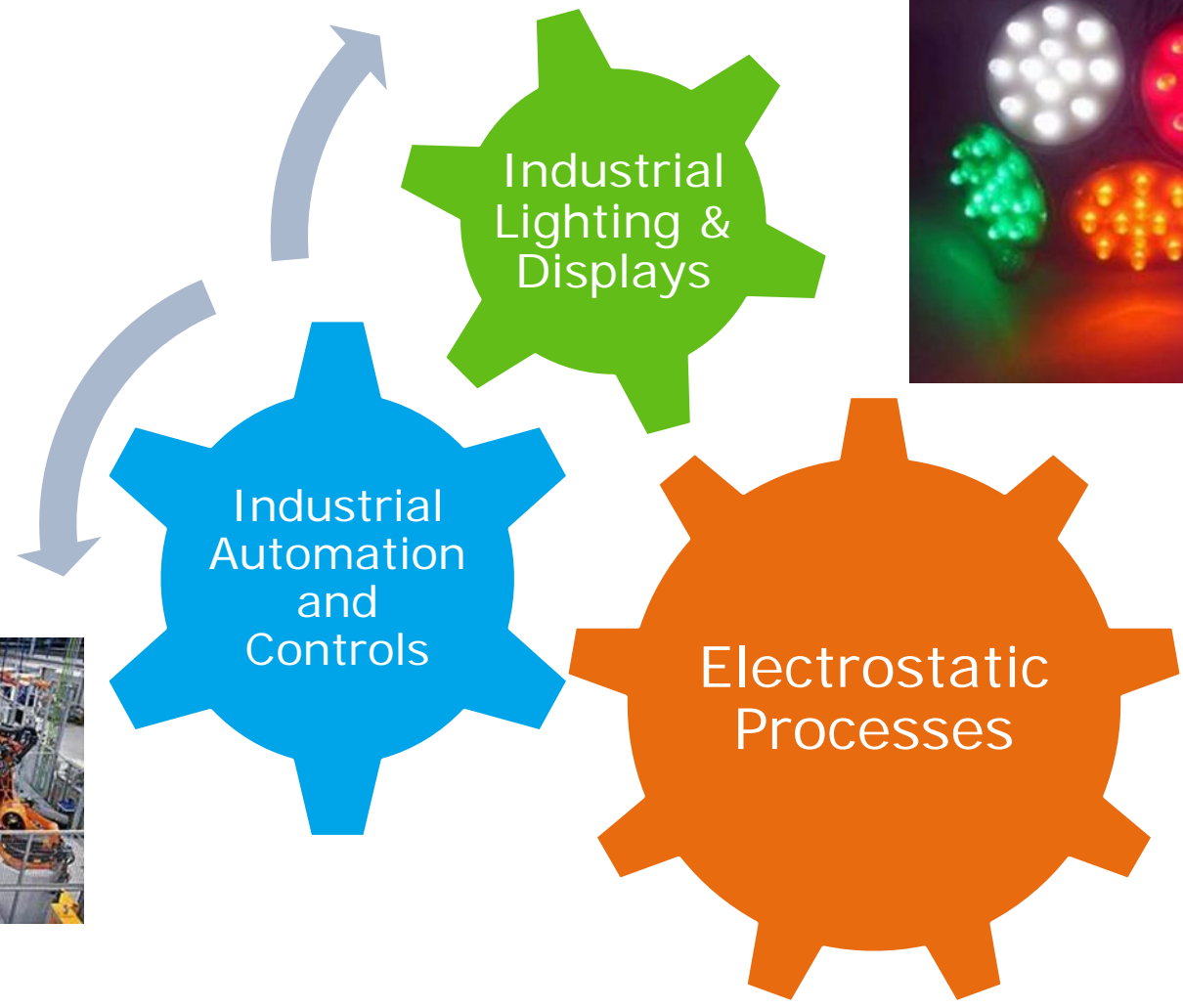
- **Industrial Lighting and Displays**
- **Electrostatic Processes**
- **Industrial Automation and Control**



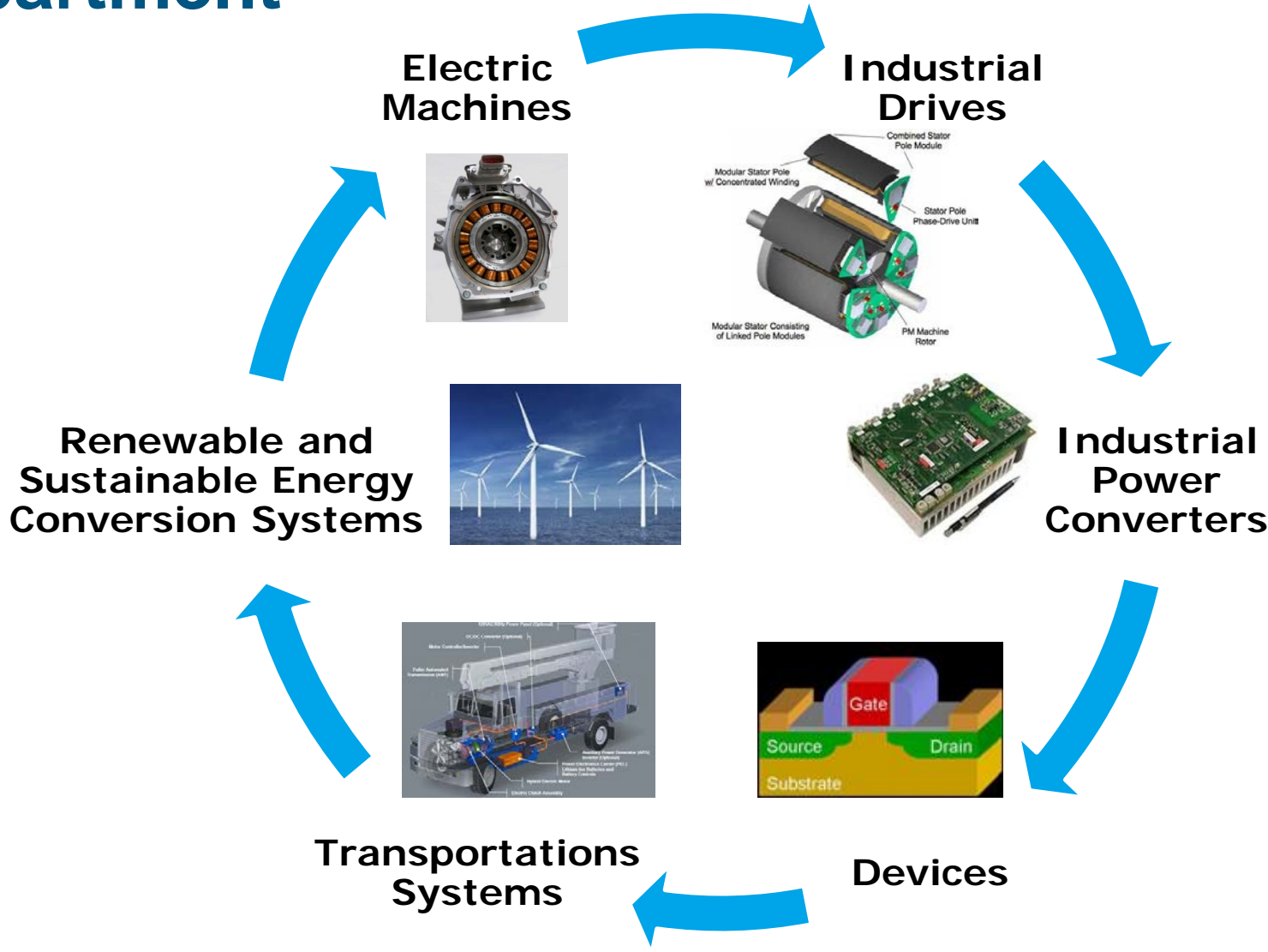
Industrial & Commercial Power Systems (I&CPSD)

- **Energy Systems**
- **Power Systems Engineering**
- **Codes and Standards**
- **Power Systems Protection**
- **Rural Electric Power**

Manufacturing Systems & Development Department's Committees



Industrial Power Conversion Systems Department



Process Industries Department Committees



Electrical Safety

Pulp, Paper, and Forest Industry



Petroleum & Chemical Industry

Mining Industry



Cement Industry



Metal Industry

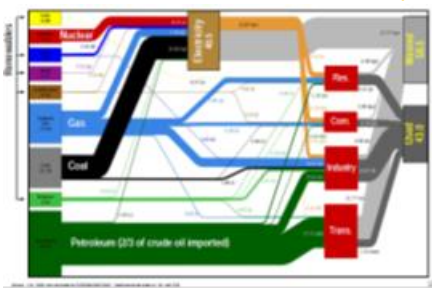


Industrial and Commercial Power Systems Department Committees



Power System Protection

Power System Engineering



Energy Systems

Rural Electric Power



Codes and Standards

IAS Conferences

2016 Conferences

Applied Power Electronics
Cement Industry
Electrical Safety
Energy Conv. Congress and Expo.
IAS Annual Meeting
Ind. And Commercial Power Syst.
Int'l Electric Machines and Drives
Petroleum and Chemical Industry
Pulp and Paper Industry
Rural Electric Power
Transportation Electrification
~20 more as Technical Co-Sponsor

Financial Sponsors

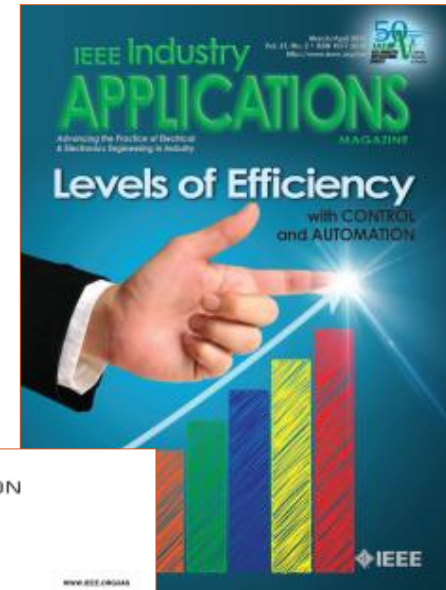
IAS, PELS, PSMA
IAS, Portland Cement Association
IAS
IAS, PELS
IAS
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IAS, IES, PELS, PES
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IAS, PELS
IAS

Standards/Awards/Education

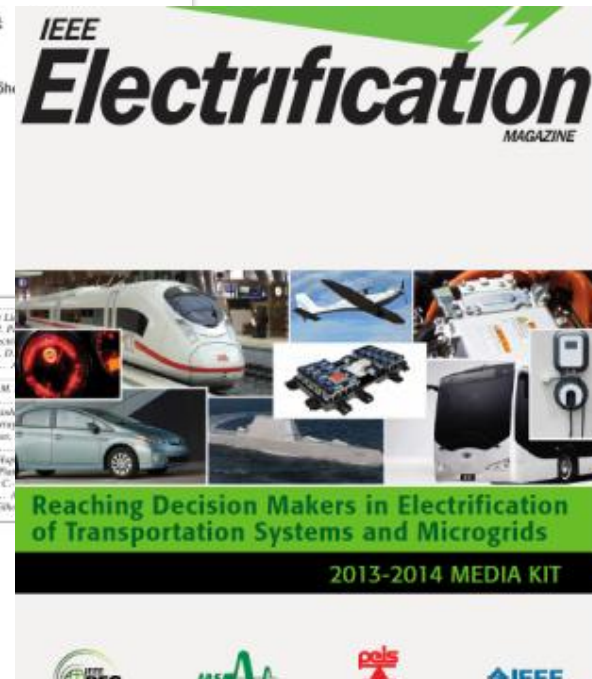
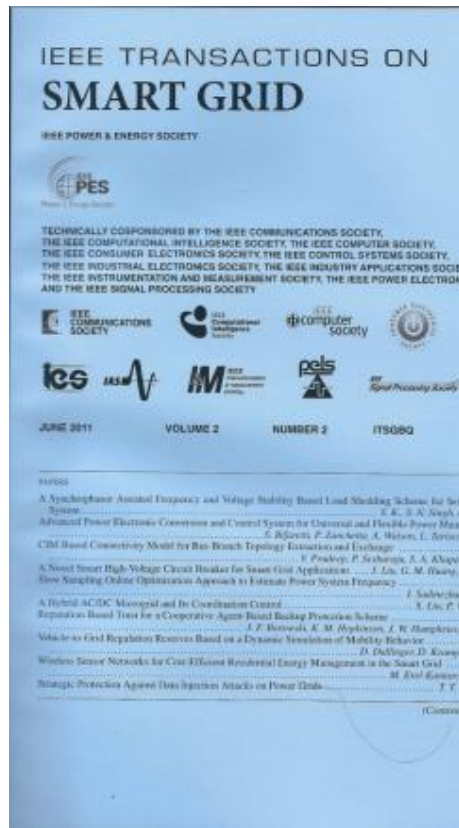
- ◆ Standards
 - ◆ IAS Continued leadership in Standards, in the top three of all 46 Societies
- ◆ Awards
 - ◆ Institution Level Awards
 - ◆ Society Level Awards
 - ◆ Outstanding Achievement Award
 - ◆ Distinguished Service Award
 - ◆ Society Prize Paper Awards
 - ◆ Industry Applications Magazine Prize Article Award
 - ◆ Society Chapter Awards
 - ◆ IEEE IAS Andrew W. Smith Outstanding Young Member Award
 - ◆ IEEE IAS Outstanding Young Member Service Award (established in 2015)
 - ◆ Myron Zucker Undergraduate Student Design Awards
 - ◆ Department/Committee Level Awards
- ◆ Education
 - ◆ New IAS Webinar Series is a screaming success!

IAS Publications

- Presentation first Policy
- Conference Records
 - Between 10 and 15 each year
- IAS Magazine
 - Published six times per year
 - Approximately 500 pages
- Transactions on Industry Applications
 - Published six times per year
 - Approximately 2000 pages



Joint Publications



IAS – What We have Accomplished

- Ranked #1 in membership growth of 46 Societies
 - 1050 new members last year, 10.9%
- Over 3% of our members are IEEE Fellows
- 2015 Member survey: 75% very satisfied, 85% intend to renew
- 151 Students attending 2016 IAS Annual Meeting on the AMTGP – the most in history
- IAS Publication explosion
 - 30% increase in TIA and IAM page count
- New IAS Chapter Explosion
 - Over 100 New IAS Chapters 2015-2016

IAS – Investing in Our Future

- 300+ Student/Member IAS Travel Grants: \$280K
- Added Publications page count: \$125K
- IEEE Future Energy Challenge: \$15K
- Transportation Electrification Community: \$18K
- Humanitarian Initiatives
 - IEEE Smart Village DR Congo: \$30K
 - IAS/SIGHT Funding “Safety OH Power Lines-India”: \$5K/\$8K
- Patrick McCarren, IAS Executive Director – driving new initiatives:
 - Social Media
 - Student Industry career letter to manager
 - IAS eLearning
 - Young Professional Webinars/Expert Webinars/Tutorial Series

Thank You!

